page:-00:-01

BRUHATH BENGALURU MAHANAGARA PALIKE

Bytarayanapura ~~BTBBAS~~ DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 06/03/2023

Item No. 1

1 — Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.

Sl No	CHAINAGE Land Mark		No	L (m)	B (m)	D (m)	Qty	Remarks
	For New Rcc Drain							
	6th cross Vayunandana layout							
	LHS		1	30.00	1.00	1.00	30.00	
			1	24.00	1.00	1.00	24.00	
	RHS							
			1	30.00	1.00	1.00	30.00	
			1	30.00	1.00	1.00	30.00	
			1	27.00	1.00	1.00	27.00	
	Culvert							
			1	6.50	2.00	1.20	15.60	
	Total Executed Quantity						**156.60**	**Cum**
	Limited to Schedule B Qty						**154.40**	**Cum**

Asst Engineer
Ward 10

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Asst Executive Engineer
Kodigehalli Sub-division

BRUHATH BENGALURU MAHANAGARA PALIKE

Byrasandra Kempapura DIVISION

f Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding i ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 10/03/2023

Item No.	2	
2	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates	

Sl No	CHAINAGE		No	L	B	D	Qty	Remarks
	Land Mark			(m)	(m)	(m)		
	For New Rcc Drain							
	6th cross Vayunandana layout							
	LHS		1	30.00	1.00	0.15	4.50	
			1	24.00	1.00	0.15	3.60	
	RHS							
			1	30.00	1.00	0.15	4.50	
			1	30.00	1.00	0.15	4.50	
			1	27.00	1.00	0.15	4.05	
	Culvert							
			1	6.50	1.80	0.15	1.76	
	Total Executed Quantity						22.91	Cum
	Limited to Schedule B Qty						20.52	Cum

Asst Engineer
Ward 10

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

Asst Executive Engineer
Kodigehalli Sub-division

BRUHATH BENGALURU MAHANAGARA PALIKE

Byatarayanapura ~~HEBBAL~~ DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 14/03/2023

Item No.	3							
3	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand)							
Sl No	CHAINAGE Land Mark		No	L (m)	B (m)	D (m)	Qty	Remarks
	Culvert							
	1st Course							
			2	6.50	0.60	0.45	3.51	
	2nd Course							
			2	6.50	0.45	0.45	2.63	
	Total Executed Quantity						6.14	Cum
	Limited to Schedule B Qty						5.67	Cum

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-division

Assistant Executive Engineer
Kodigenalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

Byatarayanapura BBMP DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 16/03/2023

Item No.	4							
4	Providing ruled pointing to cursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as pre specification							
Sl No	CHAINAGE		No	L	B	D	Qty	Remarks
	Land Mark			(m)	(m)	(m)		
	Culvert							
			2	6.50		0.90	11.70	
	Total Executed Quantity						11.70	Sqm
	Limited to Schedule B Qty						10.80	Sqm

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

Kempapura HEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 20/03/2023

Item No.	5
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid eparately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates

Sl No	CHAINAGE / Land Mark		No	L (m)	B (m)	D (m)	Qty	Remarks
	For New Rcc Drain							
	6th cross Vayunandana layout							
	LHS		1	30.00	0.90	0.15	4.05	
			1	24.00	0.90	0.15	3.24	
	RHS							
			1	30.00	0.90	0.15	4.05	
			1	30.00	0.90	0.15	4.05	
			1	27.00	0.90	0.15	3.65	
	For Raft							
	For Side wall							
	6th cross Vayunandana layout							
	LHS		2	30.00	0.15	0.60	5.40	
			2	24.00	0.15	0.60	4.32	
	RHS							
			2	30.00	0.15	0.60	5.40	
			2	30.00	0.15	0.60	5.40	
			2	27.00	0.15	0.60	4.86	
	Total Executed Quantity						**44.42**	**Cum**
	Limited to Schedule-B Qty						**44.10**	**Cum**

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

HEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 15/03/2023

Item No.	6						
6	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.						
Sl No	CHAINAGE	No	No of bars	length of bar	Co-Eff	Qty	Remarks
	Land Mark						
	For New Rcc Drain						
	6th cross Vayunandana layout						
	LHS						
	U-Shap main bar						
	10mm dia @ 100mm C/ C						
		1	541.00	2.10	0.62	704.38	
	Distrubution bar						
		1	13.00	89.50	0.39	453.77	
	RHS						
	U-Shap main bar						
	10mm dia @ 100mm C/ C						
		1	901.00	2.10	0.62	1173.10	
	Distrubution bar						
		1	13.00	89.50	0.39	453.77	
						2785.01	
	Total Executed Quantity					2.79	Tonne
	Limited to Schedule-B Qty					2.65	Tonne

Asst Engineer
Ward 10

Assistant Executive Engineer
Asst Executive Engineer
Kodigehalli Sub-division
Kodigehalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

Bellandur Kenaparu KEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 21/03/2023

Item No.	7							
7	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately)Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregates							
Sl No	**CHAINAGE**		**No**	**L**	**B**	**D**	**Qty**	**Remarks**
	Land Mark			**(m)**	**(m)**	**(m)**		
	Culvert Vent concrete							
			1	6.50	1.40	0.10	0.91	
	Culvert Ramp concrete							
			2	6.50	1.00	0.15	1.95	
	Total Executed Quantity						**2.86**	**Cum**
	Limited to Schedule-B Qty						**2.70**	**Cum**

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-Division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

Byatarayanapura HEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 26/04/2023

Item No.	8							
8	Providing and fixing pre cast covering slab made out of CC 1:2:4 with 10 cm, thick and finishing cutting, including from work, curing, including cost of all materials, labour hire, charges of missionary, loading, unloading, lead and lift transportation et cetera. Complete(data rate)							
Sl No	**CHAINAGE** / **Land Mark**		**No**	**L (m)**	**B (m)**	**D (m)**	**Qty**	**Remarks**
	6th cross Vayunandana layout							
	LHS		1	30.00	0.75		22.50	
			1	24.00	0.75		18.00	
	RHS							
			1	30.00	0.75		22.50	
			1	30.00	0.75		22.50	
			1	27.00	0.75		20.25	
	Total Executed Quantity						**105.75**	**Sqm**
	Limited to Schedule-B Qty						**105.00**	**Sqm**

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

Bytharayanapura HEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 26/04/2023

Item No.	9							
9	Providing and fixing pre cast covering slab 250 mm thick made out of CC 1:2:4 and jelly 25MM down size with steel reinforcement, including framework, curing, including cost of all materials, labour higher charges of missionary loading and loading lift and lead transportation extra complete as per engineer in charge(As per data rate)							
Sl No	**CHAINAGE**		**No**	**L**	**B**	**D**	**Qty**	**Remarks**
	Land Mark			**(m)**	**(m)**	**(m)**		
	Culvert Vent concrete							
			1	6.50	1.50		9.75	
	Total Executed Quantity						**9.75**	**Sqm**
	Limited to Schedule B Qty						**9.00**	**Sqm**

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

HEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 18/04/2023

Item No.	10
10	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately

Sl No	CHAINAGE / Land Mark	No	L (m)	B (m)	D (m)	Qty	Remarks
	2nd cross Balaji layout						
		1	30.00	(5.0+5.1)/2	0.20	30.30	
		1	14.00	(5.1+4.6)/2	0.20	13.58	
	3rd cross						
		1	30.00	(5.3+5.2)/2	0.20	31.50	
		1	30.00	(5.2+6.7)/2	0.20	35.70	
		1	7.00	(6.7+6.9)/2	0.20	9.52	
	Cross Road						
		1	30.00	(4.6+5.4)/2	0.20	30.00	
		1	30.00	(5.4+5.4)/2	0.20	32.40	
		1	30.00	(5.4+5.4)/2	0.20	32.40	
		1	1.80	(5.4+4.1)/2	0.20	1.71	
	2nd cross Vayunandana layout						
		1	28.60	(3.5+3.6)/2	0.20	20.31	
	Approach	1	6.00	(4.6+5.4)/2	0.20	6.00	
	Total Executed Quantity					**243.42**	**Cum**
	Limited to Schedule B Qty					**243.00**	**Cum**

Asst Engineer
Ward 10

Assistant Executive Engineer
Kodigehalli Sub-division
BBMP, Bangalore

Asst Executive Engineer
Kodigehalli Sub-division

BRUHATH BENGALURU MAHANAGARA PALIKE

HEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 27/04/2023

Item No.	11
11	Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ m3 , optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing.

Sl No	CHAINAGE / Land Mark		No	L (m)	B (m)	D (m)	Qty	Remarks
	2nd cross Balaji layout							
			1	30.00	(5.0+5.1)/2	0.15	22.73	
			1	14.00	(5.1+4.6)/2	0.15	10.19	
	3rd cross							
			1	30.00	(5.3+5.2)/2	0.15	23.63	
			1	30.00	(5.2+6.7)/2	0.15	26.78	
			1	7.00	(6.7+6.9)/2	0.15	7.14	
	Cross Road							
			1	30.00	(4.6+5.4)/2	0.15	22.50	
			1	30.00	(5.4+5.4)/2	0.15	24.30	
			1	30.00	(5.4+5.4)/2	0.15	24.30	
			1	1.80	(5.4+4.1)/2	0.15	1.28	
	2nd cross Vayunandana layout							
			1	28.60	(3.5+3.6)/2	0.15	15.23	
	Approach		1	6.00	(4.6+5.4)/2	0.15	4.50	
	Total Executed Quantity						**182.56**	**Cum**
	Limited to Schedule B Qty						**182.25**	**Cum**

182.58

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

HEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 02/05/2023

Item No.	12
12	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14-days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work.

Sl No	CHAINAGE / Land Mark	No	L (m)	B (m)	D (m)	Qty	Remarks
	2nd cross Balaji layout						
		1	30.00	(5.0+5.1)/2	0.15	22.73	
		1	14.00	(5.1+4.6)/2	0.15	10.19	
	3rd cross						
		1	30.00	(5.3+5.2)/2	0.15	23.63	
		1	30.00	(5.2+6.7)/2	0.15	26.78	
		1	7.00	(6.7+6.9)/2	0.15	7.14	
	Cross Road						
		1	30.00	(4.6+5.4)/2	0.15	22.50	
		1	30.00	(5.4+5.4)/2	0.15	24.30	
		1	30.00	(5.4+5.4)/2	0.15	24.30	
		1	1.80	(5.4+4.1)/2	0.15	1.28	
	2nd cross Vayunandana layout						
		1	28.60	(3.5+3.6)/2	0.15	15.23	
	Approach	1	6.00	(4.6+5.4)/2	0.15	4.50	
	Total Executed Quantity					**182.56**	**Cum**
	Limited to Schedule B Qty					**182.25**	**Cum**

182.

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore

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BRUHATH BENGALURU MAHANAGARA PALIKE

Byatarayanapura HEBBAL DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 10/05/2023

Item No.	13						
13	Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum						
Sl No	CHAINAGE / Land Mark	No	L (m)	B (m)	D (m)	Qty	Remarks
	Qty vide item no 1 & 10		397.40			397.40	
	Total Executed Quantity					397.40	Cum
	Limited to Schedule B Qty					377.53	Cum

Asst Engineer
Ward 10

Asst Executive Engineer,
Kudigehalli Sub-division

Assistant Executive Engineer
Kudigehalli Sub Division
BBMP, Bangalore

BRUHATH BENGALURU MAHANAGARA PALIKE

Byatarayanapura ~~HEBBAL~~ DIVISION

Name of Work: Improvements to roads and drains in various Cross, roads of Kempapura and surrounding area in ward No 10. Kempapura

Measurement Sheet

1st and Final Bill

Name of Agency: Sri.M S Varadarajappa

Estimate Cost : Rs.40.00 Lakhs

Job Code No. 010-23-000005

Measurement Recorded on : 10/05/2023

Item No.	14						
14	Cost of Haulage Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km						
Sl No	CHAINAGE / Land Mark	No	L (m)	B (m)	D (m)	Qty	Remarks
	Qty vide item no 13		397.40	1.28		508.67	
	Total Executed Quantity					508.67	Cum
	Limited to Schedule B Qty					483.23	Cum

Asst Engineer
Ward 10

Asst Executive Engineer
Kodigehalli Sub-division

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore